

## RESULTS

A total of 12 experiments were performed, 3 with each venom. An increase in the mean systemic arterial pressure was observed in all cases; the increases ranged from 4-57 mm Hg beginning after a latent period of 27-140 seconds, and with one exception reaching a maximum after 1-16 minutes. A summary of the results of these experiments is given in Table 1.

An unusual effect was recorded in rabbit number 6 which received 0.6 mg of *L. variolus* venom. In all other animals the maximum pressure was reached in less than 16 minutes, but in this animal there was an initial small increase of 8 mm Hg after a latent period of 80 seconds, followed by a return to normal after 2 minutes, with subsequent gradual increase in pressure until a maximum increase of 15 mm Hg was recorded after 41:50 minutes.

## DISCUSSION

Our studies demonstrate that all of the known North American species of the genus *Latrodectus* have venoms which have a hypertensive effect on the mammalian systemic arterial pressure. McCrone (1964) has previously shown that these venoms are lethal to mammals. Troise (1928) and Sampayo (1944) on the basis of their experiments concluded that the hypertensive factor in the venom is separate from the lethal neurotoxic factor. Bettini and Toschi-Frontali (1960), however, found the same protein fraction is responsible for both effects based on fractionation studies using paper electrophoresis.

## ACKNOWLEDGMENTS

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## A NEW GLASS LIZARD FROM VERACRUZ, MEXICO

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OUR knowledge of *Ophisaurus* Daudin in Mexico is obscure. In fact, Smith and Taylor (1950, p. 194, footnote 97) emphatically excluded the genus from their Mexican checklist. McConkey (1954 and 1955) established the presence of *Ophisaurus* in Mexico, but unfortunately his specimens were imperfect. A lizard with a crushed head from near Valles, San Luis Potosi, was named *Ophisaurus incomptus* McConkey, and the remains of another specimen that had been hacked to death with a machete was tentatively assigned to the new species. The latter specimen was from Laguna de Los Cocos, Veracruz. A third specimen (USNM 6078) with the label "Jalapa, Veracruz" has been mentioned by Yarrow (1884) and Cope (1900), but McConkey (1954) has found it to be typical *O. attenuatus attenuatus* (a United States subspecies) and states "It is probably true that USNM 6078 has incorrect data". Smith and Taylor are more positive in their rejection of this record.

During August of 1964 a collecting trip to Veracruz by the author and his wife yielded an additional Mexican specimen of *Ophisaurus* from coastal dune-scrub within the suburbs of the city of Veracruz. Fortunately, the specimen is almost perfect, although it does have a partially broken tail. This form exhibits character differences that are consistent with those previously found reliable in the definition of *Ophisaurus* species. I wish to call this new Veracruz specimen

### *Ophisaurus ceroni* sp. nov.

*Diagnosis.* An *Ophisaurus* differing from other New World members of the genus by the following combination of characters: frontonasal divided; scales along lateral fold 101; four indistinct, white, vertical bars on each side of neck; white spots on dorsum absent; distinct, dark mid-dorsal stripe present; no dark pigmentation below lateral fold.

*Holotype.* Museum of Natural History Illinois State University Number 272 (figs. 1a and b); taken by J. Alan and Donna Rae Holman from Veracruz, Veracruz, Mexico, August 11, 1964; habitat, coastal dune-scrub.

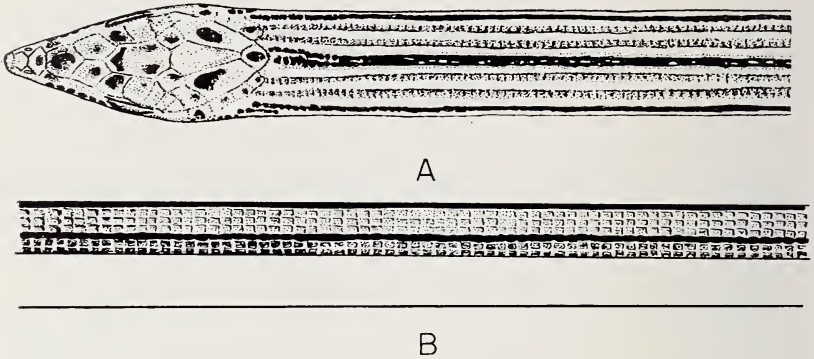


Fig. 1. Pigmentation of M.N.H.I.S.U. 272, *Ophisaurus ceroni* sp. nov. A, dorsal view of head and anterior part of body. B, lateral view of anterior part of body. Drawings about twice natural size.

*Etymology.* Named in honor of Señor Carlos Cerón of Cuautlapan, Veracruz, in recognition of his dilligent and acute aid to herpetologists of the last three decades.

*Description of Holotype.* Snout-vent length 143 mm.; tail partially broken; head width 8.8 mm., eye diameter 2.9 mm.; dorsal scales in 14 longitudinal series; scales around parietal 7-7, upper labials 11-11, preoculars 3-3, postnasals 2-2; scales around tail 18; scales along lateral fold 101.

Frontonasal divided; labials separated from orbit by lorilabials and suboculars; prefrontals in broad contact; upper postnasal in contact with supracanthal row as well as with anteriormost canthal; anterior frontonasal separates postinternasals; five supraoculars; canthals extending to just anterior of middle of eye; frontal broad and rectangular posteriorly, somewhat pointed anteriorly, anterior end meeting fused prefrontals; interparietal broad anteriorly, tapering to a point posteriorly; occipital about as broad as interparietal at its greatest width; frontoparietal in contact with third and fourth supraoculars; first and second upper labials in contact with nasal.

Body broader than high; dorsal scales keeled; ventrals smooth and flat. Ear opening oval, larger than round nostril.

Dorsal ground color grayish-brown; interrupted by three distinct dark stripes, two lateral and one mid-dorsal. Each lateral stripe confined to a little less than one scale row; mid-dorsal stripe occupying adjacent halves of two scale rows. Discrete white spots

lacking on both back and sides; no dark pigment below lateral fold. Head light grayish-brown; both top and sides of head speckled with dark spots; lower jaw with a few dark spots. Four indistinct white, vertical bars present on each side of neck.

*Discussion.* An exhaustive study of New World *Ophisaurus* by McConkey (1954) has shown that the species of this genus are very similar in external morphology, yet they remain distinct in nature and may be distinguished from one another on the basis of combinations of external characters. Skeletal differences tend to confirm the validity of the recognized species of *Ophisaurus* (Auffenberg, 1955, Etheridge, 1960 and 1961, Holman, 1958, and Weigel, 1962).

*Ophisaurus ceroni* has a combination of strong characters that separates it from other New World species. Some of the most important of these characters follow: In *O. ceroni* the scales along the lateral line are more than 97 as in *O. ventralis*, *O. attenuatus*, and *O. incomptus*; in *O. compressus* they are 97 or less. In *O. ceroni* the upper labials are not in contact with the orbit; the same condition obtains in *O. ventralis* and in *O. attenuatus*, but in *O. compressus* the upper labials are in contact with the orbit; head scale characters are unknown in *O. incomptus*. The frontonasal is divided into an anterior and a posterior frontonasal in *O. ceroni* and in *O. compressus*; this scale is single in *O. ventralis* and *O. attenuatus*. A distinct mid-dorsal stripe is present in *O. ceroni*, *O. compressus*, and *O. attenuatus*; this stripe is absent or very indistinct in *O. ventralis* and *O. incomptus*. The area below the lateral fold lacks dark pigment in *O. ceroni*, *O. ventralis*, and *O. incomptus*; in *O. attenuatus* and *O. compressus* stripes or other dark markings occur below the lateral fold.

*Relationships.* McConkey (1955) lists an *Ophisaurus* specimen (AMNH 15473) that was rendered almost useless for study by the blows of a machete. This specimen, from Laguna de los Cocos, Veracruz, was tentatively assigned to the new species *O. incomptus*. McConkey states (referring to AMNH 15473) "I should not be surprised if it eventually were shown to be still another distinct form. It is recorded from sand dunes, a habitat completely different from the deciduous forest area in which the Valles specimen was taken. My previous work with glass lizards in southeastern United States indicates that in the genus *Ophisaurus* habitat differences are closely linked with morphological ones". In another